| In | de | X | of | CI | air | ns |  |
|----|----|---|----|----|-----|----|--|
|    |    |   |    |    |     |    |  |

| Application. | /Control | No. |
|--------------|----------|-----|
|--------------|----------|-----|

Robert G. Santos

10/510,996

RILEY ET AL. Art Unit

Reexamination

Applicant(s)/Patent under

Q.,

Examiner

3673

Rejected Allowed

(Through numeral) Cancelled

Restricted

Non-Elected N

Interference

Appeal 0 Objected

| Cla          | Date   |        |              |              |  |  |  |          |  |                 |
|--------------|--|--------|--------------|--------------|--|--|--|----------|--|-----------------|
|              |  |        |              |              | 寸  |  |  |          |  |                 |
| Final        | Original                                     | 20/2/6 |              |              |  |  |  |          |  |                 |
|              | 1  | +      |              |              |  |  |  |          |  |                 |
|              | 2  | +      | _            |              |  |  |  |          |  | $\Box$          |
|              | 3  | +      |              |              |  |  |  | $\neg$   |  | $\neg$          |
|              | 4  | +      |              |              | -  | _  |  |          | _  | -               |
|              | 1<br>2<br>3<br>4<br>5                        | +      | _            | -            | _  | _  | _  | _        | _  | 一               |
|              | 6  | +      | -            | $\vdash$     |  |  | -  | _        |  | $\dashv$        |
|              | 6<br>7                                       | +      | _            |              | _  | -  | _  | $\dashv$ |  | -               |
|              | 8  | +      | _            |              |  |  |  | _        | -  | _               |
|              | 9  | +      |              |              |  |  |  | _        |  |                 |
|              | 10   | +      |              | -            |  |  |  | _        |  |                 |
|              | 11   | +      | -            |              |  | _  |  |          |  |                 |
|              | 12   | +      | _            | _            | _  | _  |  | _        | _  | $\dashv$        |
| <b></b>      | 13   | +      | -            | $\vdash$     |  |  | -  |          |  | $\dashv$        |
|              | 14   | +      | $\vdash$     |              |  | -  | $\vdash$   |          |  | $\dashv$        |
|              | 11<br>12<br>13<br>14<br>15<br>16<br>17<br>18 | +      | _            |              | -  | -  | $\vdash$   | -        |  | $\vdash$        |
| $\vdash$     | 16   | +      |              |              |  | —  |  |          | -  | $\vdash$        |
|              | 17   | +      |              |              | -  | -  |  |          | -  | $\vdash$        |
|              | 18   | +      | _            |              | -  | -  |  | _        | _  | $\dashv$        |
| <u> </u>     | 19   | +      | _            | _            |  |  | -  | -        |  | Н               |
| <del> </del> | 20   | +      |              |              | $\vdash$   |  | $\vdash$   |          | -  | Н               |
|              | 21   | +      |              | -            | _  |  | <del>                                     </del> | _        |  | Н               |
|              | 21<br>22                                     | +      |              | $\vdash$     | _  | _  | -  |          |  | Н               |
|              | 23   | +      |              |              |  |  |  |          |  | П               |
|              | 23<br>24<br>25                               | +      |              |              |  |  |  |          |  | П               |
|              | 25   | +      |              |              |  |  |  |          |  |                 |
|              | 26<br>27                                     | +      |              |              |  |  |  |          |  |                 |
|              | 27   | +      |              |              |  |  |  |          |  |                 |
|              | 28   | +      |              | _            | _  | _  |  |          |  | Ш               |
|              | 29   | +      |              | _            |  |  |  |          |  | Ш               |
|              | 29<br>30                                     | +      |              |              |  |  |  |          |  |                 |
|              | 31   | +      | <u> </u>     | <u> </u>     | _  | L  | <u> </u>   | L        | _  |                 |
|              | 32<br>33                                     | +      | <u> </u>     | <u> </u>     | <u> </u>   | <u> </u>   | L_   | L.       |  | Щ               |
|              | 33   | +      |              |              |  |  |  |          |  | Щ               |
| <u> </u>     | 34<br>35                                     | +      | <u> </u>     | <u> </u>     | <u>L</u>   | <u> </u>   | <u> </u>   | L        | <u> </u>   |                 |
|              | 35   | +      | <u> </u>     | ·            | <u> </u>   |  | <u> </u>   | L        | <u> </u>   |                 |
| <u> </u>     | 36   | +      |              | <u> </u>     | <u>L</u>   |  | <u> </u>   | L        | <u> </u>   | Щ               |
|              | 37<br>38                                     | +      | _            | <u> </u>     | L  | _  | <u> </u>   | L        |  |                 |
|              | 38   | +      | <u> </u>     | ├            | <u> </u>   | _  | <u> </u>   | <u> </u> | <u> </u>   | $\sqcup$        |
|              | 39   | +      |              | <u> </u>     | <u> </u>   | ⊢  | $\vdash$   | <u> </u> | _  | $\vdash \vdash$ |
|              | 40   | +      |              | $\vdash$     | $\vdash$   | $\vdash$   | $\vdash$   |          | $\vdash$   | $\vdash \vdash$ |
| -            | 41   | +      |              | -            |  |  | -  | $\vdash$ | $\vdash$   | Н               |
|              | 43   | +      | $\vdash$     |              | $\vdash$   | $\vdash$   |  | $\vdash$ | <u> </u>   | $\vdash \vdash$ |
| -            | 44   | +      |              | <del> </del> |  |  | $\vdash$   | $\vdash$ | <del> </del>                                     | $\vdash$        |
| <del> </del> | 45   | +      | <del> </del> | $\vdash$     | ⊢  | $\vdash$   | -  | $\vdash$ | $\vdash$   | $\vdash$        |
| $\vdash$     | 46   | +      |              | t            | $\vdash$   | _  | <u> </u>   | $\vdash$ | <del> </del>                                     | H               |
| -            | 47   | +      | -            | <del> </del> | <del> </del>                                     | <del>                                     </del> | <del>                                     </del> | $\vdash$ | <u> </u>   | H               |
|              | 48   | +      | Ι-           | T            | $\vdash$   | $\vdash$   |  | $\vdash$ |  | H               |
| $\vdash$     | 49   | +      |              | _            | <del>                                     </del> | <del>                                     </del> |  | $\vdash$ | <del>                                     </del> | $\vdash$        |
|              | 50   | +      |              | <u> </u>     | <del>                                     </del> | _  | <u> </u>   | $\vdash$ | ┢  | $\vdash$        |
| 1 .          |  |        |              |              |  |  | •  |          | •  |                 |

| Cla      | im       |          |          |                |              | Date         | •            |          |              |          |
|----------|----------|----------|----------|----------------|--------------|--------------|--------------|----------|--------------|----------|
| Final    | Original | 20/2/6   |          |                |              |              |              |          |              |          |
|          | 51<br>52 | +        |          |                |              |              |              |          |              |          |
| <u> </u> | 52       | +        |          |                |              |              |              |          |              |          |
|          | 53       | +        |          |                |              |              |              |          |              |          |
|          | 54<br>55 | +        |          |                |              |              |              |          |              |          |
|          | 55       | +        |          |                |              |              |              |          |              |          |
| <u></u>  | 56       | <u> </u> |          |                | _            |              |              |          |              |          |
| <u></u>  | 57       | +        | _        | _              | L_           |              |              |          |              |          |
|          | 58       | +        |          | <u> </u>       |              |              |              |          |              |          |
|          | 59       | <u> </u> |          | _              |              |              |              |          |              |          |
| L        | 60       | +        |          | $oxed{oxed}$   | ļ            |              |              |          |              |          |
|          | 61       | +        |          | <u> </u>       |              |              |              |          |              |          |
| ļ        | 62       | +        |          |                | <u> </u>     |              |              |          |              |          |
| <u> </u> | 63       | +        | <u> </u> | 匚              | _            |              |              | _        | _            | <u>_</u> |
| <u></u>  | 63<br>64 | +        |          | _              |              |              |              |          | _            |          |
| L        | 65       | +        | <u>L</u> |                |              | Ш            |              |          | <u> </u>     |          |
|          | 66<br>67 | +        | <u> </u> |                |              |              |              |          | <u> </u>     |          |
| L        | 67       | +        |          |                |              |              |              |          |              |          |
|          | 68       | +        |          | L              |              | L            |              |          | <u> </u>     | L        |
|          | 69<br>70 | +        |          |                |              |              |              |          |              |          |
|          | 70       | +        |          |                |              |              |              |          |              | L        |
|          | 71       | +        | L        | 乚              | <u> </u>     |              |              |          |              |          |
|          | 72       | +        |          |                |              |              |              |          |              |          |
|          | 72<br>73 | +        |          | _              |              | <u> </u>     |              |          |              |          |
|          | 74       | +        |          |                |              |              |              |          | <u> </u>     |          |
|          | 74<br>75 | +        |          |                | _            |              |              |          |              |          |
|          | 176      | +        |          |                | <u> </u>     |              |              |          | L            |          |
|          | 77<br>78 | +        |          | _              | _            | _            | <u> </u>     |          |              |          |
| <u> </u> | 78       | +        | _        |                |              |              |              |          | _            | <u> </u> |
| ļ        | 79       | +        |          |                | <u> </u>     | <u> </u>     | <u>_</u>     | _        |              | <u> </u> |
| <u> </u> | 80       | +        | <u> </u> | _              | _            |              |              |          |              | _        |
| <u> </u> | 81       | +        | <u> </u> | _              | <u> </u>     | <u> </u>     |              |          |              |          |
|          | 82       | +        | <u> </u> | <u> </u>       | _            | _            | _            |          | <u> </u>     | <u> </u> |
|          | 83       | +        | ļ        | _              | _            | <u> </u>     |              |          | <u> </u>     | _        |
|          | 84       | +        | <u> </u> | <u> </u>       | <u> </u>     | <u> </u>     | ļ            | L.       |              |          |
| <u> </u> | 85       | +        | ļ        | _              | L            | <u> </u>     |              | _        | _            | <u> </u> |
|          | 86       | +        | Ь.       | $\vdash$       | _            | <u> </u>     | <u> </u>     | _        | <u> </u>     | _        |
|          | 87       | +        | <u> </u> | <u> </u>       | ļ            | <b>—</b>     | <u> </u>     |          | <u> </u>     | _        |
| <u> </u> | 88       | +        | <b> </b> | <del> </del>   | <u> </u>     | <u> </u>     | <u> </u>     | <u> </u> | $\vdash$     | <u> </u> |
|          | 89       | +        | <u> </u> | ⊢              | <del> </del> | -            | ļ            |          | -            | ļ        |
|          | 90       | +        | ļ        |                | <u> </u>     | ļ            |              | -        | <del> </del> | $\vdash$ |
|          | 91       | +        | ┞        | $\vdash$       | $\vdash$     | ├            | $\vdash$     | $\vdash$ | $\vdash$     | $\vdash$ |
|          | 92       | +        | ├-       | <del> </del>   | <del> </del> | -            |              | <u> </u> | -            | -        |
| -        | 93       | +        |          | <u> </u>       | ├            | -            | <del> </del> | _        | _            | $\vdash$ |
|          | 94       | +        | ├        | <del> </del>   | ├-           | <u> </u>     | ├-           | <u> </u> | <u> </u>     | <u> </u> |
|          | 95       | -        | ├        | ├              | $\vdash$     | -            | $\vdash$     | _        | ⊢            | $\vdash$ |
|          | 96       | ├        | ⊢        | <del> </del> - | <b>├</b> ─   | <del> </del> | ├            | <u> </u> | <u> </u>     | <u> </u> |
|          | 97       | ├-       | ⊢        | ├              | -            | $\vdash$     | $\vdash$     | $\vdash$ | $\vdash$     | $\vdash$ |
|          | 98       | $\vdash$ | $\vdash$ | $\vdash$       | $\vdash$     | $\vdash$     | $\vdash$     | $\vdash$ | $\vdash$     | $\vdash$ |
|          | 99       | ├        | ┼        | ├              | -            | ├            | -            | ⊢        | $\vdash$     | -        |
|          |          |          |          |                |              |              |              |          |              |          |

| Cla  | Date  |  |          |              |  |  |  |  |  |                 |  |
|--|---|--|----------|--------------|--|--|--|--|--|-----------------|--|
|  |   |  |          |              | n  |  |  |  |  | $\dashv$        |  |
| <u>a</u>   | Original  |  |          |              |  |  |  |  |  |                 |  |
| Final  | rig   |  |          |              |  |  |  |  |  |                 |  |
|  |   |  |          |              |  |  |  |  |  |                 |  |
|  | 101<br>102<br>103   |  | $\neg$   |              | _  |  |  |  |  | $\dashv$        |  |
|  | 102   |  | $\neg$   | $\neg$       |  |  |  |  |  |                 |  |
|  | 103   |  | $\dashv$ |              |  |  |  |  | $\neg$   | _               |  |
|  | 104<br>105<br>106   |  |          |              |  |  |  |  |  |                 |  |
| <b></b> -  | 105   | T  |          |              |  |  |  |  |  |                 |  |
|  | 106   |  |          |              |  | _  |  |  |  | $\neg$          |  |
|  | 107   | П  |          |              |  |  |  |  |  | $\neg$          |  |
|  | 107<br>108<br>109<br>110                                    | П  |          |              |  |  |  |  |  | $\dashv$        |  |
|  | 109   |  | $\neg$   |              |  |  |  |  |  | ヿ               |  |
|  | 110   |  |          |              |  |  |  |  |  | $\neg$          |  |
|  | 1 111   |  |          |              |  |  | _  |  |  | $\neg$          |  |
| l  | 112   |  |          |              | $\overline{}$                                    | $\Box$   |  | $\Box$   | _  | $\neg$          |  |
|  | 113   |  |          |              |  |  | Г  |  |  | $\dashv$        |  |
| <b></b>  | 112<br>113<br>114<br>115<br>116<br>117                      | М  |          |              | $\Box$   |  |  | Г  | П  | $\dashv$        |  |
|  | 115   | $\Box$   |          |              |  | $\vdash$   |  |  |  | -               |  |
| <b> </b>   | 116   | Н  |          | Н            |  |  | H  | Н  | т  | $\vdash$        |  |
| <del>                                     </del> | 117   |  |          | т            | $\vdash$   | $\vdash$   |  | Т  | Н  | $\vdash$        |  |
| $\vdash$   | 118<br>119<br>120   | $\vdash$   |          | Н            | $\vdash$   | $\vdash$   | $\vdash$   | <del>                                     </del> | Н  | Н               |  |
|  | 119   |  | -        | -            |  |  |  |  |  |                 |  |
|  | 120   | -  | _        | _            | ╌  | ┢  | -  | $\vdash$   |  | $\dashv$        |  |
|  | 121   | $\vdash$   | _        | _            |  | ┢┈   |  | H  |  |                 |  |
|  | 122   |  |          | $\vdash$     | $\vdash$   | $\vdash$   | -  | -  | ┝  | -               |  |
|  | 123   | -  |          | $\vdash$     | -  | $\vdash$   |  | 一  | $\vdash$   | $\neg$          |  |
| $\vdash$   | 121<br>122<br>123<br>124<br>125<br>126<br>127<br>128<br>129 |  | _        | -            |  | ┢  | $\vdash$   | $\vdash$   | $\vdash$   | _               |  |
|  | 125   | $\vdash$   | _        | ┢            | $\vdash$   |  | H  | $\vdash$   | $\vdash$   | _               |  |
| $\vdash$   | 126   |  | _        | $\vdash$     |  | _  | ┝  |  | $\vdash$   | $\vdash$        |  |
|  | 127   |  | _        | ┢─           |  |  |  | $\vdash$   | $\vdash$   |                 |  |
|  | 128   |  |          |              | -  | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   |                 |  |
|  | 129   | $\vdash$   | _        | $\vdash$     | $\vdash$   | $\vdash$   | $\vdash$   | <del>                                     </del> |  |                 |  |
|  | 130   | $\vdash$   | _        | $\vdash$     |  | $\vdash$   | _  | -  | <u> </u>   | $\dashv$        |  |
|  | 131   |  |          |              |  | _  | ┢  | ┢  |  | $\vdash$        |  |
| <u> </u>   | 132   | $\vdash$   |          | ┢═           |  | $\vdash$   | ┪  | $\vdash$   | $\vdash$   | H               |  |
|  | 132<br>133  | $\vdash$   | _        | $\vdash$     |  | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | Н               |  |
|  | 134   |  |          |              | I  | H  | Ι  | <u> </u>   | <del> </del>                                     | Н               |  |
| <del>                                     </del> | 135   |  | _        | $\vdash$     |  | ┪  | ┰  | $\vdash$   | $\vdash$   | $\vdash \vdash$ |  |
| -  | 135<br>136<br>137   | Н  | _        | $\vdash$     | <u> </u>   | ┢  | $\vdash$   | H  | ┢  | Н               |  |
|  | 137   |  |          | ┢            | <u> </u>   | $\vdash$   | $\vdash$   | Н  | $\vdash$   | $\vdash \vdash$ |  |
|  | 138   | $\vdash$   | $\vdash$ |              | $\vdash$   | $\vdash$   | $\vdash$   |  | <del>                                     </del> | Н               |  |
| $\vdash$   | 138<br>139  | $\vdash$   | $\vdash$ | $\vdash$     | <del>                                     </del> | $\vdash$   | $\vdash$   | <del>                                     </del> |  | Н               |  |
| -  | 140   | $\vdash$   | <u> </u> |              | $\vdash$   | T  | $\vdash$   | $\vdash$   |  | $\vdash$        |  |
|  | 141   | <del>                                     </del> |          | <del> </del> | ╁  | <del>                                     </del> | $\vdash$   | $\vdash$   | <del>                                     </del> | H               |  |
|  | 142   |  |          | <del> </del> |  | $\vdash$   | $\vdash$   | $\vdash$   |  | Н               |  |
|  | 143   | -  |          | $\vdash$     | <del>                                     </del> | $\vdash$   | <del>                                     </del> | $\vdash$   | <del>                                     </del> | Н               |  |
| <u> </u>   | 144   | $\vdash$   |          | $\vdash$     | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$        |  |
|  | 145   | $\vdash$   | -        |              | $\vdash$   | ├  | -  |  | $\vdash$   | Н               |  |
| $\vdash$   | 146   | $\vdash$   |          |              | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | Н               |  |
|  | 147   | <del>                                     </del> | $\vdash$ |              | <del> </del>                                     | $\vdash$   | <del>                                     </del> | $\vdash$   | $\vdash$   | Н               |  |
| -  | 148   | <del>                                     </del> | -        |              |  |  | -  | $\vdash$   | -  | Н               |  |
|  | 149   | $\vdash$   | $\vdash$ | $\vdash$     | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | ├-   | $\vdash \vdash$ |  |
|  | 150   | -  | -        | ├─           | -  |  | -  | $\vdash$   | <del> </del>                                     | Н               |  |
| Щ  | 1100  | <u> </u>   |          | <u> </u>     |  | <u> </u>   | <u> </u>   | 1  | <u> </u>   |                 |  |